

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:
injuring a vessel region, ~~said~~the vessel region comprising a bypass vessel leading to a target area for blood flow, wherein the bypass vessel is adjacent to a primary vessel leading to a the target area ~~for blood flow~~, ~~said~~the primary vessel having an occlusion to blood flow; and
delivering an arteriogenic factor to ~~said~~the bypass vessel in a medically effective manner to structurally enlarge an existing blood vessel.
2. (Currently Amended) The method of claim 1 wherein ~~said delivery~~delivering comprises providing ~~said~~the arteriogenic factor to ~~said~~the vessel region for a duration ranging from about one week to about five weeks.
3. (Currently Amended) The method of claim 1 further comprising providing a second delivery of ~~said~~the arteriogenic factor to ~~said~~the vessel region at about 3 to about 10 days after ~~said~~the delivering.
4. (Currently Amended) The method of claim 1 wherein ~~said delivery~~delivering comprises: providing a syringe to accommodate ~~said~~the arteriogenic factor; and
advancing ~~said~~the arteriogenic factor from ~~said~~the syringe to ~~said~~the vessel region.
5. (Currently Amended) The method of claim 1 wherein ~~said delivery~~delivering comprises: providing a needle catheter to accommodate ~~said~~the arteriogenic factor; and
advancing ~~said~~the arteriogenic factor from ~~said~~the needle catheter to ~~said~~the vessel region.
6. (Currently Amended) The method of claim 1 wherein ~~said delivery~~delivering comprises: providing a porous balloon catheter having a porous balloon to accommodate ~~said~~the arteriogenic factor; and
advancing ~~said~~the arteriogenic factor from ~~said~~the porous balloon to ~~said~~the vessel region via pores of ~~said~~the porous balloon.

7. (Canceled).

8. (Currently Amended) The method of claim 1 wherein ~~said~~the arteriogenic factor is a needle catheter, ~~said~~the delivery comprising advancing a needle of ~~said~~the needle catheter to ~~said~~the vessel region, ~~said~~the needle to puncture ~~said~~the vessel region.

9. (Canceled).

10. (Currently Amended) The method of claim 1 wherein delivering ~~said~~the arteriogenic factor includes delivering a catheter with a distal portion cooled to between about 0° C and about 10° C.

11. (Currently Amended) The method of claim 1 wherein delivering ~~said~~the arteriogenic factor includes delivering a catheter with a distal portion heated to a range from about 40° C to about 90°C.

12.-23. (Canceled)

24. (Currently Amended) A method of structurally enlarging a bypass vessel adjacent to a primary vessel, ~~said~~the method comprising:

injuring ~~said~~the bypass vessel, wherein the bypass vessel and a primary vessel provide a path for delivery to a target area and wherein the primary vessel comprises an occlusion;

advancing a distal portion of a catheter to ~~said~~the bypass vessel;

delivering an arteriogenic factor in a medically effective manner to ~~said~~the bypass vessel via ~~said~~the catheter; and

causing an enlargement to at least a portion of the bypass vessel.

25.-32. (Canceled)

33. (Currently Amended) The method of claim 24 wherein delivering further comprises providing ~~said~~the arteriogenic factor to ~~said~~the bypass vessel for a duration ranging from about one week to about five weeks.

34. (Currently Amended) The method of claim 24 wherein delivering further comprises providing a second delivery of ~~said~~the arteriogenic factor to ~~said~~the bypass vessel at about 3 to about 10 days after a first delivering of ~~said~~the arteriogenic factor.

35. (Currently Amended) The method of claim 24 wherein delivering further comprises: providing a syringe to accommodate ~~said~~the arteriogenic factor; and advancing ~~said~~the arteriogenic factor from ~~said~~the syringe to ~~said~~the bypass vessel.

36. (Currently Amended) The method of claim 24 wherein delivering further comprises: providing a needle catheter to accommodate ~~said~~the arteriogenic factor; and advancing ~~said~~the arteriogenic factor from ~~said~~the needle catheter to ~~said~~the bypass vessel.

37. (Currently Amended) The method of claim 24 wherein delivering further comprises: providing a porous balloon catheter having a porous balloon to accommodate ~~said~~the arteriogenic factor; and
advancing ~~said~~the arteriogenic factor from ~~said~~the porous balloon to ~~said~~the bypass vessel via pores of ~~said~~the porous balloon.